

## MT-24 : 24<sup>th</sup> International Conference on Magnet Technology, 2015

We are pleased to invite you to MT24, the 24<sup>th</sup> International Conference on Magnet Technology, which will take place in Seoul, Korea from October 18 to 23, 2015. It is our great pleasure to host MT24 in 2015, which will be the 50th anniversary of International Conference on Magnet Technology.

MT24 will cover magnet technology ranging from large scale magnets to magnets for home appliances. The most powerful particle accelerator, the Large Hardron Collider (LHC) at CERN, cannot be fabricated without an advanced magnet technology. The nuclear fusion reactor of the International Thermonuclear Experimental Reactor (ITER) is another example for which magnet technology plays a crucial role. During the Conference, there will be an official visit of the Korea Superconducting Tokamak Advanced Research (KSTAR) facilities which is operated by the National Fusion Research Institute, Korea. All components and materials related to the construction of magnets are the scope of the MT24. Design methods and analysis tools of the magnet system and the magnet itself are amongst essential topics of MT24. MT24 will provide you with a great opportunity to see cutting-edge magnet technologies.

➤ Web page : <http://www.mt24.org>

### ➤ Important Dates

- ✓ Abstract Submission : January 5 ~ March 5, 2015
- ✓ Notification of Abstract Acceptance : April 30, 2015
- ✓ Pre-Registration : August 21 ~ October 8, 2015
- ✓ Early - Application for Exhibit : January 5 ~ June 1, 2015
- ✓ Late Application for Exhibit : June 2 ~ August 20, 2015
- ✓ Paper Submission : October 1 ~ October 20, 2015

### ➤ Topics

#### A. Magnets

A01. Superconducting Accelerator Magnets

A02. Conventional Accelerator Magnets

A03. Wigglers, Undulators, and Solenoid Magnets

A04. Detector Magnets

A05. Nuclear/Fusion Magnets

A06. Superconducting High Field Magnets

A07. Hybrid High Field Magnets

A08. Pulsed High Field Magnets

A09. Resistive High Field Magnets

B. Medical and Biological Applications

B01. NMR

B02. MRI

B03. Magnets for Medical Therapy Devices

B04. Other Medical and Biological Applications

C. Materials

C01. Low Tc Wires and Cables

C02. High Tc Wires and Cables

C03. Conventional and Other Conductors

C04. Permanent Magnetic Materials

C05. Magnetic Materials for Flux Return

C06. Structural Materials

C07. Electrical Insulations

C08. Mechanical Behavior of Conductors

C09. Conductors for Fusion and Accelerators

D. Cryogenics / Power Supply

D01. Cryogenic Cooling for Magnets

D02. Cooling for Conventional Magnets

D03. Power Supplies for Superconducting Magnets

D04. Power Supplies for Conventional Magnets

D05. Current Leads

D06. Quench Protection System

D07. Other Magnet Components

## E. Analysis

- E01. Magnet Design Methods
- E02. Electromagnetic Commutations
- E03. Field Quality
- E04. Quench Detection and Protection
- E05. Magnet/Coils Stability
- E06. Multi-physics Analysis
- E07. Analysis of Magnetic Field
- E08. Analysis of Mechanical Stress
- E09. Electromagnetic Analysis
- E10. HTS Design Analysis and Performance
- E11. Computational Magnet System
- E12. Test and Measurement

## F. Power Applications

- F01. Energy Storage
- F02. Motors and Generators
- F03. Transformers and FCLs
- F04. MHD Power Generation
- F05. Power Cables
- F06. Machine Design
- F07. Grid Analysis with SC Devices

## G. Industrial Applications

- G01. Levitation and Bearings
- G02. Magnetically Levitated Trains
- G03. Magnetic Separation
- G04. Crystal Growth
- G05. Magnetic Pumps
- G06. Novel Industrial Applications

G07. Space Applications

H. Other Applications

H01. Magnets for Technology Development

H02. Special Coils

H03. Novel Applications

H04. Superconducting Strand and Cable Characterization

H05. Novel Diagnostic Techniques

H06. Magnetic Measurements

H07. Thermo-Mechanical Measurements

H08. Permanent Magnets

H09. Other Magnetic Materials and Applications

➤ Publication of paper

The MT 24 manuscripts are scheduled to be published in the vol.26, no.3, June, 2016 issue of the *IEEE Transactions on Applied Superconductivity*, and as such will be subject to the usual peer review procedures of the Transactions.

➤ Organized by KISAC (The Korean Institute of Superconductivity and Cryogenics)

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➤ Committee

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- Local Organizing Committee Chair : Sang-Soo Oh (KERI, Korea)
- Industrial Exhibits Chair : Hunju Lee (SuNAM Co., Ltd., Korea)